

WASTE DISCHARGE REQUIREMENTS NO. R5-2008-XXXX
 LAWRENCE LIVERMORE NATIONAL SECURITY, LLC, AND
 U.S. DEPARTMENT OF ENERGY
 SAN JOAQUIN AND ALAMEDA COUNTIES

ATTACHMENT 5

Mechanical equipment discharges; general minerals and oil and grease analytical results from samples collected at Buildings 806, 827A, 827C, 827D, and 827E.

Parameter		B806	B827A	B827C	B827D	B827E
General mineral		10/7/04	10/7/04	10/7/04	10/7/04	10/7/04
Aluminum	mg/L	<0.05	<0.05	<0.05	<0.05	<0.25
Bicarbonate alkalinity (as CaCO ₃)	mg/L	200	200	170	210	<10
Calcium	mg/L	7.5	11	6.8	3.9	8.5
Carbonate alkalinity (as CaCO ₃)	mg/L	17	72	280	57	800
Chloride	mg/L	83	102	92	87	210
Copper	mg/L	0.17	0.028	2.4	0.25	0.35
Fluoride	mg/L	0.46	0.58	0.35	0.26	1.1
Hydroxide alkalinity (as CaCO ₃)	mg/L	<5	<10	<10	<10	120
Iron	mg/L	<0.05	<0.05	2.3	1.5	<0.25
Magnesium	mg/L	<0.5	<0.5	1.4	<0.5	<0.5
Manganese	mg/L	<0.01	<0.01	0.16	0.018	<0.05
Nickel	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrate (as N)	mg/L	<0.1	<0.1	0.12	0.17	0.15
Nitrate plus Nitrite (as N)	mg/L	<0.1	<0.1	0.12	0.17	0.15
Nitrite (as N)	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Ortho-phosphate	mg/L	0.17	0.36	30	3.4	180
pH	units	8.28	8.67	9.64	8.71	11.3
Potassium	mg/L	8.9	10	78	15	280
Sodium	mg/L	210	250	320	240	740
Specific conductance	µmhos/cm	1,040	1,240	1,710	1,180	4,340
Sulfate	mg/L	194	227	301	206	885
Surfactants	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Total alkalinity (as CaCO ₃)	mg/L	220	280	440	260	920
Total dissolved solids	mg/L	727	915	1,220	835	3,300
Total hardness (as CaCO ₃)	mg/L	20	23	23	11	22
Total phosphorus (as P)	mg/L	0.06	0.16	9.4	1.1	54
Zinc	mg/L	<0.05	<0.05	0.34	<0.05	<0.05
Oil and Grease	mg/L	<5	<5	<5	<5	<5